

Canadian Geotechnical Journal

Contents
Volume 35, 1998

Revue canadienne de géotechnologie

Sommaire
Volume 35, 1998

February / février

ARTICLES

R. Kerry Rowe and John R. Booker	Modelling impacts due to multiple landfill cells and clogging of leachate collection systems	1
Mosleh A. Al-Shamrani	Application of the C_a/C_c concept to secondary compression of sabkha soils	15
Dayakar Penumadu, Arumugam Skandarajah, and Jean-Lou Chameau	Strain-rate effects in pressuremeter testing using a cuboidal shear device: experiments and modeling	27
T.P. Stoutjesdijk, M.B. de Groot, and J. Lindenberg	Flow slide prediction method: influence of slope geometry	43
Michel Aubertin, Jean-François Ricard, and Robert P. Chapuis	A predictive model for the water retention curve: application to tailings from hard-rock mines	55
S.T. Hsu and H.J. Liao	Uplift behaviour of cylindrical anchors in sand	70
D.W. Sargent, R.D. Beckie, and G. Smith	Design and performance of deep well dewatering: a case study	81
Fangsheng Shuai and D.G. Fredlund	Model for the simulation of swelling-pressure measurements on expansive soils	96
Charles W.W. Ng, B. Simpson, M.L. Lings, and D.F.T. Nash	Numerical analysis of a multipropelled excavation in stiff clay	115
Jack I. Clark	The settlement and bearing capacity of very large foundations on strong soils: 1996 R.M. Hardy keynote address	131
Ross W. Boulanger, Mark W. Meyers, Lelio H. Mejia, and Izzat M. Idriss	Behavior of a fine-grained soil during the Loma Prieta earthquake	146

NOTES

Chang-Yu Ou, Richard N. Hwang, and Wei-Jung Lai	Surface settlement during shield tunnelling at CH218 in Taipei	159
K. Nagendra Prasad, B.R. Srinivasa Murthy, A. Vatsala, and T.G. Sitharam	Yielding of sensitive clays: micromechanical considerations	169
L.D. Baikie	Comparison of limits states design methods for bearing capacity of shallow foundations	175
Instructions to Authors		I-1
Recommendations aux auteurs		R-1

April / avril

ARTICLES

D.M. Raju and R.J. Fannin	Load-strain-displacement response of geosynthetics in monotonic and cyclic pullout	183
Bradley Wiebe, James Graham, Gary Xiangmin Tang, and David Dixon	Influence of pressure, saturation, and temperature on the behaviour of unsaturated sand-bentonite	194
R.C.K. Wong	Swelling and softening behaviour of La Biche shale	206
E. Eberhardt, D. Stead, B. Stimpson, and R.S. Read	Identifying crack initiation and propagation thresholds in brittle rock	222
J.F. (Derick) Nixon and Nick Holl	Geothermal modeling of soil or mine tailings with concurrent freezing and deposition	234
Sasha D. Milovic	A comparison between observed and calculated large settlements of raft foundations	251
G. Habibagahi and M. Mokhberi	A hyperbolic model for volume change behavior of collapsible soils	264
M. Uthayakumar and Y.P. Vaid	Static liquefaction of sands under multiaxial loading	273

A.M.P. Wedage, N.R. Morgenstern, and D.H. Chan	Simulation of time-dependent movements in Syncrude tailings dyke foundation	284
Boris Benko and Doug Stead	The Frank slide: a reexamination of the failure mechanism	299
R. Kerry Rowe and S.K. Ho	Horizontal deformation in reinforced soil walls	312
R.F. Dawson, N.R. Morgenstern, and A.W. Stokes	Liquefaction flowslides in Rocky Mountain coal mine waste dumps	328
NOTES		
Guofu Zhu and Jian-Hua Yin	Consolidation of soil under depth-dependent ramp load	344
A. Ayoubian and P.K. Robertson	Void ratio redistribution in undrained triaxial extension tests on Ottawa sand	351
V. Silvestri	On the determination of the stress-strain curve of clay from the undrained plane-strain expansion of hollow cylinders: a long-forgotten method	360
A.M.P. Wedage, N.R. Morgenstern, and D.H. Chan	A strain rate dependent constitutive model for clays at residual strength	364
P. Foray, L. Balachowski, and J-L. Colliat	Bearing capacity of model piles driven into dense overconsolidated sands	374
Steven M. Harris, Neil R. Thomson, and Kentner S. Novakowski	Determining the orientation of fracture planes in a weathered clay till using core samples	386
Ahmed M. Samieh and Ron C.K. Wong	Modelling the responses of Athabasca oil sand in triaxial compression tests at low pressure	395
DISCUSSIONS		
A. Sridharan and K. Prakash	Liquid limits and fall cones: Discussion	407
Serge Leroueil and Jean-Pierre Le Bihan	Liquid limits and fall cones: Reply	408
O. Hungr and R.D. Beckie	Assessment of the hazard from rock fall on a highway: Discussion	409
C.M. Bunce, D.M. Cruden, and N.R. Morgenstern	Assessment of the hazard from rock fall on a highway: Reply	410
June / Juin		
ARTICLES		
Shangyan Huang, S.L. Barbour, and D.G. Fredlund	Development and verification of a coefficient of permeability function for a deformable unsaturated soil	411
Shangyan Huang, D.G. Fredlund, and S.L. Barbour	Measurement of the coefficient of permeability for a deformable unsaturated soil using a triaxial permeameter	426
S. Mezazigh and D. Levacher	Laterally loaded piles in sand: slope effect on $P-Y$ reaction curves	433
P.K. Robertson and C.E. (Fear) Wride	Evaluating cyclic liquefaction potential using the cone penetration test	442
Khalid Margaa et Ahmed Abdelgader	Une méthodologie de cartographie des zones potentiellement instables Application à la région d'Al Hoceima (Maroc)	460
Peter Wiklander	Permeability and volume changes in till due to cyclic freeze/thaw	471
Giovanni Cascante, Carlos Santamarina, and Najwa Yassir	Flexural excitation in a standard torsional-resonant column device	478
J.Q. Shang	Electroosmosis-enhanced preloading consolidation via vertical drains	491
R. Kerry Rowe and Sean D. Hinchberger	The significance of rate effects in modelling the Sackville test embankment	500
Afif Rahma	Modélisation du comportement du milieu granulaire en fonction de l'écrasement des grains	517
NOTES		
M.A. Fam and M.B. Dusseault	High-frequency complex permittivity of shales (0.02–1.30 GHz)	524
Chang-Yu Ou and Bor-Yuan Shiau	Analysis of the corner effect on excavation behaviors	532
August / août		
ARTICLES		
Branko Ladanyi and Adolfo Foriero	A numerical solution of cavity expansion problem in sand based directly on experimental stress-strain curves	541
A. Foriero, B. Ladanyi, S.R. Dallimore, P.A. Egginton, and F.M. Nixon	Modelling of deep seated hill slope creep in permafrost	560

Tien H. Wu and Alex Watson In situ shear tests of soil blocks with roots	579
Zuyu Chen and Songmei Li Evaluation of active earth pressure by the generalized method of slices	591
J.A. Díaz-Rodríguez, R. Lozano-Santa Cruz, V.M. Dávila-Alcocer, E. Vallejo, and P. Girón Physical, chemical, and mineralogical properties of Mexico City sediments: a geotechnical perspective	600
Limin Zhang, Xueming Yu, and Ting Hu Optimization of compaction zoning in loess embankments	611
Xiao Zhang, S. Lee Barbour, and John V. Headley A diffusion batch method for determination of the adsorption coefficient of benzene on clay soils	622
R.J. Mitchell The eleventh annual R.M. Hardy Keynote Address, 1997: Centrifugation in geoenvironmental practice and education	630
Jinqi Wei and M. Hesham El Naggar Experimental study of axial behaviour of tapered piles	641
Z.X. Zhang and R.L. Kushwaha Modeling soil freeze-thaw and ice effect on canal bank	655
H.P. Hong and J.Q. Shang Probabilistic analysis of consolidation with prefabricated vertical drains for soil improvement	666
NOTES	
Brian Stimpson Split Set friction stabilizers: an experimental study of strength distribution and the effect of corrosion	678
J.K. McKenna and K.W. Biggar The rehabilitation of a passive-ventilated slab on grade foundation using horizontal thermosyphons	684
DISCUSSION	
T.A. Newson and M. Fahey The effect of soil suction on evaporative fluxes from soil surfaces: Discussion	692
BOOK REVIEW / CRITIQUE DE LIVRE	
Gerd Gudehus Sliding friction, physical principles and applications	695
October / octobre	
ARTICLES	
Robert P. Chapuis Overdamped slug test in monitoring wells: review of interpretation methods with mathematical, physical, and numerical analysis of storativity influence	697
R. Lee and E. De Souza The effect of brine on the creep behaviour and dissolution chemistry of evaporites	720
S. Sivathayalan and Y.P. Vaid Truly undrained response of granular soils with no membrane-penetration effects	730
J.Q. Shang, M. Tang, and Z. Miao Vacuum preloading consolidation of reclaimed land: a case study	740
Dennis E. Becker, W.J. (Bill) Burwash, R.A. (Bob) Montgomery, and Y. (Bill) Liu Foundation design aspects of the Confederation Bridge	750
Sean D. Hinchberger and R. Kerry Rowe Modelling the rate-sensitive characteristics of the Gloucester foundation soil	769
Robert P. Chapuis and Djaouida Chenaf Detecting a hydraulic short circuit along a monitoring well with the recovery curve of a pumping test in a confined aquifer: method and example	790
Ping-Sien Lin, Li-Wen Yang, and C. Hsein Juang Subgrade reaction and load-settlement characteristics of gravelly cobble deposits by plate-load tests	801
P.C. Lim, S.L. Barbour, and D.G. Fredlund The influence of degree of saturation on the coefficient of aqueous diffusion	811
M. O'Kane, G.W. Wilson, and S.L. Barbour Instrumentation and monitoring of an engineered soil cover system for mine waste rock	828
Adel Hanna and Mohamed Abdel-Rahman Experimental investigation of shell foundations on dry sand	847
Jian-Hua Zhu, Musharraf M. Zaman, and Scott A. Anderson Modeling of soil behavior with a recurrent neural network	858
S. Lee Barbour Nineteenth Canadian Geotechnical Colloquium: The soil-water characteristic curve: a historical perspective	873
NOTE	
Bo Elberling and Bjarne Riis Langdahl Natural heavy-metal release by sulphide oxidation in the High Arctic	895
DISCUSSIONS	
Garry W. Stevenson Effects of abutment slopes on the performance of high rockfill dams: Discussion	902

L. Zhang and J. Du Effects of abutment slopes on the performance of high rockfill dams: Reply	903
Claudio Cherubini A few comments on pile design: Discussion	905
Yves Robert A few comments on pile design : Reply	906

ERRATUM

Tien H. Wu and Alex Watson In situ shear tests of soil blocks with roots	907
---	------------

December / décembre

ARTICLES

Filippo Santucci de Magistris, Francesco Silvestri, and Filippo Vinale Physical and mechanical properties of a compacted silty sand with low bentonite fraction	909
Tai T. Wong, Delwyn G. Fredlund, and John Krahn A numerical study of coupled consolidation in unsaturated soils	926
Robert K. Niven and Nasser Khalili In situ multiphase fluidization ("upflow washing") for the remediation of hydrocarbon contaminated sands	938
Khalid J. Fahmi and Abdallah I. Husein Malkawi Dynamic site response evaluation of the Port City of Aqaba (Jordan) employing the equivalent linear method	961
M.A. Gabr, J. Chen, and R. Thomas Soil clogging during surfactant-enhanced flushing of naphthalene-contaminated sand-kaolinite	976
Muin M. Husain, John A. Cherry, Scott Fidler, and Shaun K. Frape On the long-term hydraulic gradient in the thick clayey aquitard in the Sarnia region, Ontario	986
Pio-Go Hsieh and Chang-Yu Ou Shape of ground surface settlement profiles caused by excavation	1004
Paulo José Brugger, Márcio de Souza Soares de Almeida, Sandro Salvador Sandroni, and Willy Alvarenga Lacerda Numerical analysis of the breakwater construction of Sergipe Harbour, Brazil	1018
Diego Brocanelli and Victor Rinaldi Measurement of low-strain material damping and wave velocity with bender elements in the frequency domain	1032
R. Joel Shaw and M. Jim Hendry Hydrogeology of a thick clay till and Cretaceous clay sequence, Saskatchewan, Canada	1041
Y.P. Vaid and A. Eliadorani Instability and liquefaction of granular soils under undrained and partially drained states	1053
S.E. Burns and P.W. Mayne Monotonic and dilatory pore-pressure decay during piezocone tests in clay	1063
Sebastiano Rampello and Luigi Callisto A study on the subsoil of the Tower of Pisa based on results from standard and high-quality samples	1074

NOTES

J.R. McDougall and I.C. Pyrah Simulating transient infiltration in unsaturated soils	1093
K. Yuen, J. Graham, and P. Janzen Weathering-induced fissuring and hydraulic conductivity in a natural plastic clay	1101

DISCUSSIONS

P.D. Hallett and T.A. Newson Desiccation of a sensitive clay: application of the model CRACK: Discussion	1109
J.-M. Konrad and M. Shen Desiccation of a sensitive clay: application of the model CRACK: Reply	1111
J. Kodikara, S.L. Barbour, and D.G. Fredlund An idealized framework for the analysis of cohesive soils undergoing desiccation: Discussion	1112
J.-M. Konrad and R. Ayad An idealized framework for the analysis of cohesive soils undergoing desiccation: Reply	1115

BOOK REVIEW / CRITIQUE DE LIVRE

Stephen C. Hollingshead and John F. Gartner Urban geology of Canadian cities	1116
---	-------------

Note of appreciation / Note de reconnaissance	iii
--	------------

Author index for Volume 35 / Index des auteurs pour le volume 35	AI-1
---	-------------

Contents index for Volume 35 / Sommaire pour le volume 35	C-1
--	------------

